

In the Specification:

Please replace the description of FIG. 1 occurring on page 8, lines 16-18 with the following:

~~Figure 1~~ Figures 1A, 1B and 1C ~~a representation~~ show three representations of the relation between optical field, carrier profile and contact shape;

Please replace the specification on page 14, lines 2-18 with the following two paragraphs:

Turning now to the diagrams, ~~Figure 1 shows~~ Figures 1A-1C show overlap between the gain and the fundamental mode of the optical field within an optical waveguide. Figure ~~1(e)~~ 1C shows the situation where the gain does not match the fundamental mode of the optical field, as in the prior art. Using a shaped contact as in the present invention, as in Figures ~~1(a)~~ 1A and ~~1(b)~~ 1B, a better overlap is obtained.

~~Figure 2 shows~~ Figures 2A and 2B show the effect of QWI whereby the wells and barriers of Quantum Well structures are intermixed. As can be seen in ~~Figure 2~~ Figures 2A and 2B, the QWI smears out the energy profile of the two Quantum Wells reducing the quantum confinement of the wells within the laser structures, and simultaneously incur the effective band gap of the Quantum Wells which also lowers the optical losses in these sections. In the case of impurity free intermixing there is no added optical losses through the incorporation of the impurities that add to free carrier absorption.